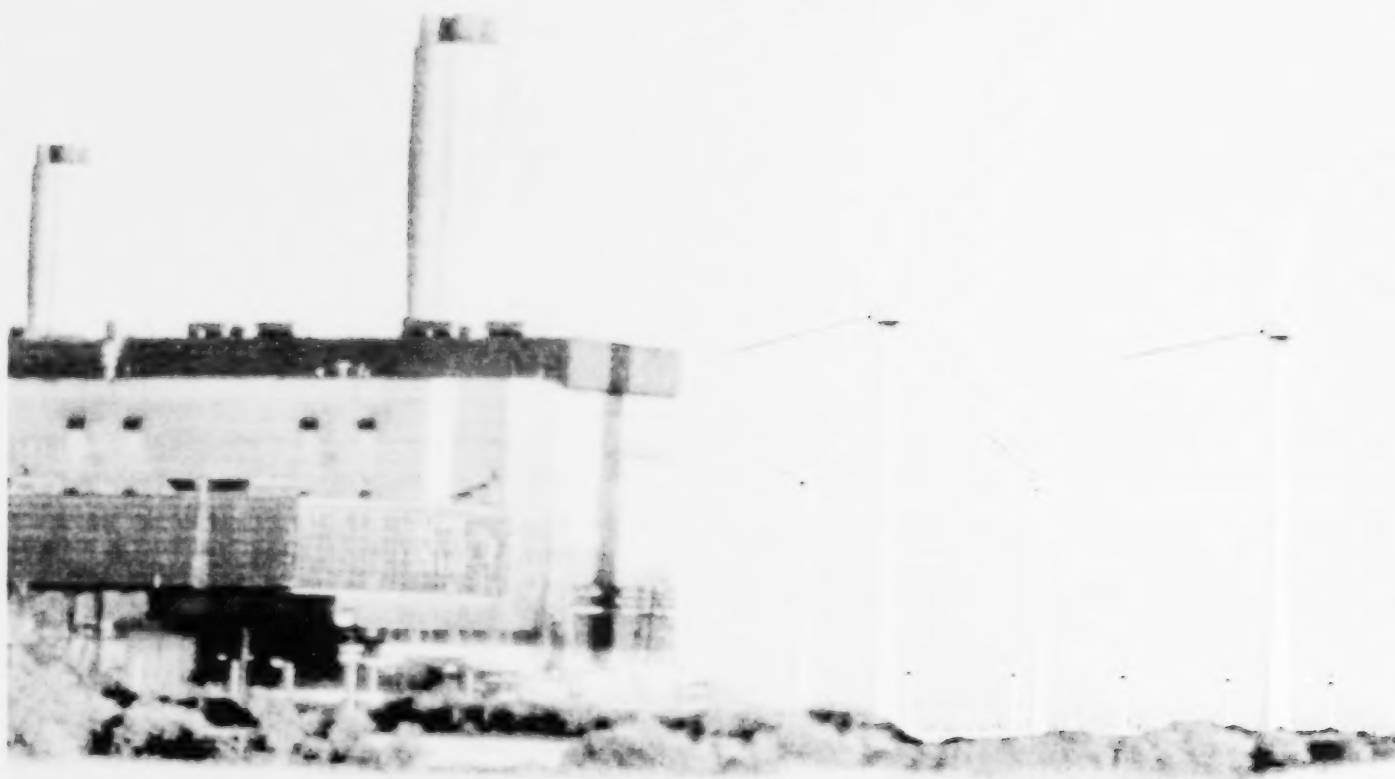


Atlantic Outlook 2008

A changing climate

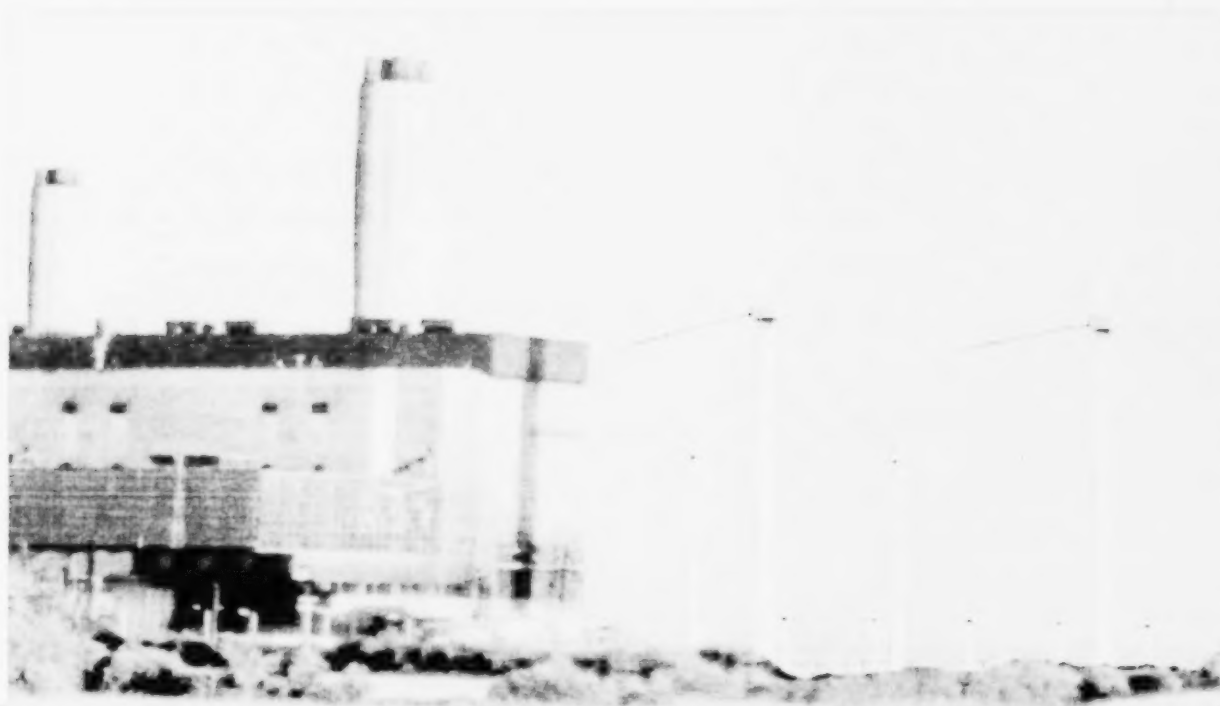
The energy sector's quest
for sustainability in a new
economic environment



Atlantic Provinces Economic Council

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Setting a new direction

In November 2007, the Atlantic Provinces Economic Council held its 13th annual Business Outlook conference. This conference is held annually in four cities across Atlantic Canada, bringing together leaders from business, government and academia to examine the region's major economic issues. At this year's event, we chose to turn a critical eye to the twin issues of climate change and the development of the region's energy sector.

Atlantic Canada's energy sector offers perhaps the most diverse mix of generation assets in North America. Among them, the provinces of New Brunswick, Newfoundland and Labrador, Nova Scotia and Prince Edward Island can boast an energy mix that includes existing oil, natural gas, thermal, hydroelectricity and nuclear assets and a number of new entrants that are producing wind, biomass and tidal power.

Driving these developments is the steady demand by the United States for more power. Atlantic Canada's close proximity to the north-eastern United States, and in particular the cities of Boston and New York, has spurred talk on this side of the border about the need to increase generating capacity and to construct additional transmission lines to get that power to market.

But just as Americans are demanding more power, both Americans and Canadians are demanding greater action on climate change.

Atlantic Canada's energy industry leaders acknowledge that climate change will be the single most important issue in the years to come. How well a company confronts this one issue will ultimately determine its long-term success – both here in Atlantic Canada and in key export markets.

APEC has been providing independent analysis and insight regarding the Atlantic Canadian economy for over 50 years. As we enter our sixth decade, we welcome the opportunity to share our research with you. In this report we profile the industry leaders who spoke at the Outlook conference and report on some of the options for Atlantic Canada's economic future – one that is surely tied to both energy exports and environmental sustainability.



Elizabeth Beale

A handwritten signature in dark ink, which appears to read "Elizabeth Beale". The script is fluid and cursive.

Elizabeth Beale
President and CEO
Atlantic Provinces Economic Council

Getting the balance right

Atlantic Canada has always had a resource-dependent economy. Forestry, fishing and mining have dominated this region's economic history for well over two centuries but in the past decade the energy industry has emerged as the lead sector for both exports and economic growth.

The energy sector is quite diverse. There are over 25 conventional power plants using coal, oil, gas and other fuels as well as one nuclear plant. The region's energy portfolio includes three offshore oil projects, one offshore and one onshore natural gas project and three refineries. In terms of renewable energy, the region boasts a tidal power plant, a small number of wind farms already in operation, a few biomass facilities and a large number of hydroelectricity operations.

Direct employment, while not large, amounts to about 12,500 people. However, the energy sector accounts for almost eight per cent of the region's GDP, a share that jumps to over 20 per cent in Newfoundland and Labrador, courtesy of its huge offshore oil output. Combined royalties from offshore projects in the Atlantic region are estimated to be about \$2 billion in 2007/08.

New England is already the main destination for Atlantic Canada's energy exports. About 85 per cent of the region's exports of refined petroleum, natural gas, crude oil and electricity are sent to the New England area. Continued growth in demand in the North East is the key driver for many of the region's current and proposed energy projects.

The Northeastern states are increasingly seeking clean energy. In December 2005, seven states - Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont - created the Regional Greenhouse Gas Initiative (RGGI), which aims to cap greenhouse gas

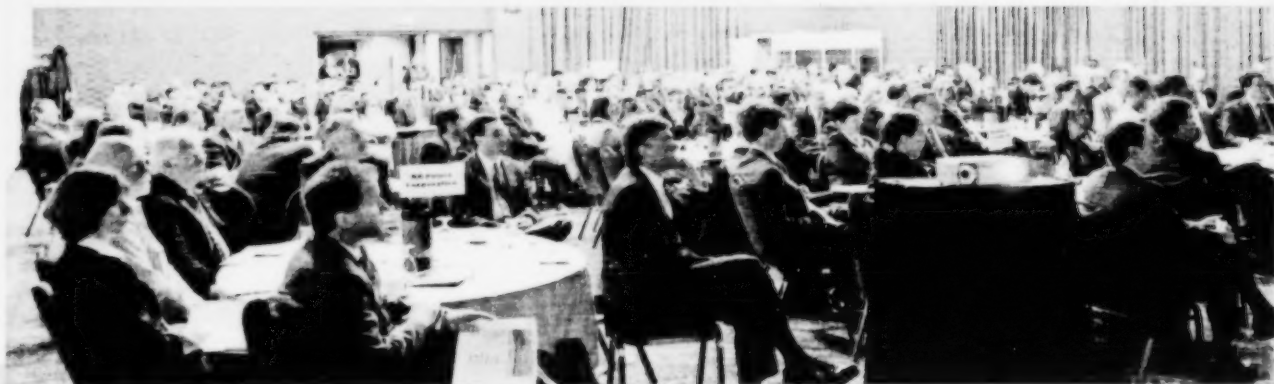
emissions between 2009 and 2014, and then reduce those emissions by 10 per cent by 2018. Massachusetts, Maryland and Rhode Island joined the initiative in 2007.

Imports of natural gas and clean electricity from Canada could play a role in meeting the initiative's ambitious targets and Atlantic Canadian companies and investors are watching this development with great interest. However there is competition nearby. Hydro-Quebec is already a much larger exporter of electricity to New England and it is at work on increasing its capacity - much of which is renewable energy through its massive hydroelectric resources and a growing investment in wind power.

To increase its exports in an American marketplace that is concerned about its environmental footprint, Atlantic Canada will need to reduce its dependence on fossil fuels for electricity generation. All four provinces are in various stages of developing their own energy strategies and climate change plans.

Uncertainty over domestic and U.S. climate change policies is only one of the risks that need to be considered. The exchange rate is a key factor that can impact profit margins. Oil and gas prices are expected to rise over time and the extent and timing of these increases can significantly impact the relative cost of nuclear, wind and other renewable energy supplies. Finally, there is the issue of technology. Breakthroughs in commercial technologies could substantially change both the supply possibilities and energy demand.

There's a lot at stake for Atlantic Canada, which stands poised to benefit from the development of these markets. In this new business climate, the region's energy sector, economy and environment are intricately tied together, which means success will come to those who get the balance right.



Energy-hungry U.S. wants clean power

Following the Atlantic Provinces Economic Council's (APEC) Outlook 2008 conference series, held in Saint John, Halifax, Charlottetown and St. John's in November 2007.

Atlantic, Canada

Atlantic Canada's natural resources could power an economic renaissance in the region by providing clean and affordable energy to a growing North American marketplace.

Wind, tidal, hydro, biomass and both onshore and offshore oil and gas projects are in various stages of development across the four Atlantic provinces, all made possible by a business model heavily dependent on exporting power.

That was the message delivered repeatedly during the Atlantic Provinces Economic Council's (APEC) Outlook 2008 conference series, held in Saint John, Halifax, Charlottetown and St. John's in November 2007.

The theme was "Creating a Sustainable Economy: The Changing Environment For Energy Developments in Atlantic Canada", and while speakers were enthusiastic about the potential for alternative and low-emission energy production, many cautioned there were still significant regulatory and transportation hurdles to overcome.

"The most important question before us today is, can Atlantic Canada come together on a cohesive plan to build a clean energy future," said APEC Senior Economist David Chaundy.

"If this region is to take full advantage of the twin opportunities that energy demand in the U.S. and climate change offer, each component, be it production, transmission or regula-

ry, will need to be in sync with all the other parts."

Right now, that means moving towards cleaner and more efficient energy sources.

"People down south are not looking for power," said NB Power president and CEO David Hay. "They are looking for clean power."

Winds of change

This has prompted the development of Atlantic Canada's significant wind resources and a resurgence of interest in tidal power in the Bay of Fundy.

When combined with existing hydro and conventional oil and gas resources, it has given Atlantic Canada a diversified mix of energy products.

"We are following the mega-trends, just like anybody else who has an international perspective," said Pascal Bruni, president of NeWind, a consortium of majority investor CHL Hydroelectric Co. Ltd., a subsidiary of ENEL Group of Italy, and Newfoundland-based fga Consulting Engineers Ltd. and Quadratic Inc. NeWind, which is investing in Newfoundland wind generation.

"Companies like ENEL that have the option to invest anywhere in the world have to go to where the markets are. We are not the market makers; we are the market followers."

Petroleum assets

Meanwhile, the region continues to develop its conventional oil and gas sector. This includes the offshore reserves at Hebron and White Rose in Newfoundland and Labrador and EnCana's Deep Panuke off coastal Nova Scotia. Offshore oil and gas production, were up 24 per cent and 13 per cent respectively in 2007.

In New Brunswick, Irving Oil is developing a second oil refinery, which will be located adjacent to the Canaport LNG (liquefied natural gas) terminal, a partnership between Irving



Oil and Spanish oil and natural gas giant Repsol. An LNG terminal is also planned in Nova Scotia and a LNG transshipment facility is proposed in Newfoundland.

Investment in these new energy projects will boost Atlantic Canadian economic growth over the next few years. High energy prices should favour longer term exploration and development in the region as global demand continues to outpace supply as mature fields begin to slow production.

"High energy demand and a weak U.S. dollar will combine to ensure the Canadian dollar continues to hover near or over parity with the U.S. dollar in 2008," said Chaundy, providing a synopsis of APEC's analysis in its winter 2008 edition of Atlantic Report.

"That will present increasing challenges to Atlantic Canadian manufacturers, particularly in the forestry sector. The drop in manufacturing jobs has had an impact on the transportation sector which has also shed jobs. The job losses in these two sectors are expected to be offset in 2008 with growth in the service industry and in construction, the latter spurred on by energy projects."

Securing the future

Scott Travers, president and COO of Minas Basin Pulp and Paper Co. of Nova Scotia, believes energy developments are important not only because of the economic opportunity, but also for the security they represent.

"In a world where wars are fought over energy supply, Nova Scotians and the rest of the Maritimes have certainly placed themselves in harm's way," said Travers, who told the Halifax audience only 11 per cent of Nova Scotia's power consumption is produced from indigenous resources.

All that power is produced from renewable sources and Travers is a strong proponent of increasing it, arguing it makes both environmental and economic sense.

His pulp and paper company is thriving in a seriously troubled industry because it invested heavily in biofuels technology and now produces its own power through the use of wood waste and post-consumer cardboard.

"Unless we embark on a timely and strategic action plan to address the issue [of rising energy costs], what is happening in the pulp and paper industry will become commonplace in the other sectors of our economy," he said.

That plan must integrate provincial regulatory, taxation and R&D policies to encourage private sector investment in energy developments, particularly in alternative, low-emissions sources.

"Regional planning for the electrical grid has to happen," said Fred O'Brien, president and CEO of Maritime Electric, PEI's Crown utility.

"We can plan all the wind generation on the Island, we can get the transmission to the border, but if we haven't been efficiently communicating to New Brunswick, obviously this is a problem."

There was universal criticism of the charging of multiple provincial tariffs, a term known as pancaking, to energy as it is transmitted across multiple provincial jurisdictions, on its way to the United States.

In the northeastern United States, renewable energy is of primary concern and an increasing number of states are putting in place regulatory policies that will require energy imports to meet specific clean energy standards.

The Regional Greenhouse Gas Initiative, which involves nine northeast and mid-Atlantic states, is exploring a cap-and-trade program to reduce carbon dioxide emissions for power plants in the region. Once in place, the guidelines are likely to be extended to exports.

"Increasingly we will be looking to site clean, renewable resources in New England," said Gordon van Welie, president and CEO of ISO New England.

"We will also be importing from those types of resources in Canada. The emphasis will be on purchasing clean resources."



The business case



Lower Churchill

Courtesy NB Hydro



Point Lepreau Nuclear Generating Station

Courtesy NB Power

"When it comes to greenhouse gases, we are all in this together. We all have a role to play."

—David Hay

Gordon van Wele, President and CEO, ISO New England

According to Gordon van Wele, as demand for energy increases within the New England states, each is struggling with determining how to diversify its fuel supply while reducing carbon dioxide emissions, as required by the Regional Greenhouse Gas Initiative (RGGI). This agreement, signed by nine states, will use a cap-and-trade system to address emissions. According to van Wele, natural gas power plants were built over the past decade to replace coal-fired plants and today about 40 per cent of New England's electricity is generated by natural gas. This has left New England consumers vulnerable to price volatility due to rising gas prices. ISO New England is considering options to address the energy shortage and increased imports from Canada is an important consideration. However, for this to work, an expanded transmission system must be built linking Atlantic Canada to New England.

"I think the key to addressing the energy challenge is to have a mix of clean, secure and cost-effective transmission and generation."

David D. Hay, President and CEO, NB Power

David Hay argued the energy-producing sector needs to reduce its dependence on fossil fuel power plants by increasing the proportion of power it makes from non-carbon dioxide producing plants. This will take time because energy projects require substantial financial investments and take years to develop, which is why decisions about New Brunswick's energy mix must be made quickly. To do that, North America policy makers must develop a universal definition of what constitutes 'clean' power and all jurisdictions must introduce measures to significantly reduce energy use amongst all users, from large industries to residential consumers. According to Hay, reducing our carbon footprint is essential.

"We believe that governments, businesses, and individuals all have a role to play in addressing the energy challenge. The first step is to reduce our carbon footprint."

**Paul Barnes, Manager, Atlantic
Canada, Canadian Association
of Petroleum Producers
(CAPP)**

Canada's provincial and federal governments should harmonize climate change regulations so businesses are dealing with one set of rules rather than a patchwork of regulations, says Paul Barnes. Accordingly, Canada's petroleum producers favour policies that place a cost on emissions and also value investment in climate change technology. Oil and gas exploration continues to be a high-risk, high-cost investment in Atlantic Canada. In Newfoundland and Labrador, producers are waiting for the provincial government to provide more information regarding offshore exploration, while in Nova Scotia, companies' willingness to continue to search for new reserves remains the key issue.

"We are not looking for a handout from the federal government," Barnes says. "We are looking for a level playing field. We are looking for a consistent regulatory environment across the country. We are looking for a consistent approach to climate change. We are looking for a consistent approach to energy. We are looking for a consistent approach to the environment."

**Pascal Brun, President,
NeWind Group**

According to Pascal Brun, international investors follow the wind – but only if it brings a return on investment. NeWind Group, a subsidiary of ENEL Group, an Italian-based global renewable energy company, is developing wind power in Newfoundland and Labrador because it is interested in supplying energy to the American market. Brun believes the opportunity is there because rising oil and gas prices are causing people to look for alternative energy sources. To encourage the development of a wind energy sector, the Atlantic Canadian provinces should develop regional policies in relation to tax credits and incentives to encourage R&D and international investment.

"The government has a role to play in encouraging the development of the wind energy sector," Brun says.

**Don Falconer, Vice President,
Corporate Development,
Aurora Energy**

Don Falconer told his audience that the threat of climate change has brought attention back to nuclear power and with that, has come the accompanying need to develop new sources of uranium. Aurora Energy is the sixth largest pre-production project in the world. Over the life of the mine, Aurora Energy will be able to produce enough uranium to provide electricity to one million homes for 150 years. The mine, located in coastal Labrador will sign its first sale agreement by the summer of 2008 and be operational by 2013.

"We are looking for a consistent regulatory environment across the country," Falconer says. "We are looking for a consistent approach to climate change. We are looking for a consistent approach to energy. We are looking for a consistent approach to the environment."

**Rob Bennett, Executive Vice-
President, Revenue and
Sustainability, Nova Scotia
Power Inc.**

Coal is no longer the answer for Nova Scotia Power, which is moving aggressively into wind and tidal power, said Rob Bennett. The Crown corporation is working with private sector investors and researchers to develop tidal power technology with a goal to begin testing in the Bay of Fundy by 2009. In addition to introducing alternative energy supplies into its system, Nova Scotia Power is also advocating a region-wide conservation and energy efficiency program and an overall reduction in greenhouse gas emissions at its plants.

"We are looking for a consistent regulatory environment across the country," Bennett says. "We are looking for a consistent approach to climate change. We are looking for a consistent approach to energy. We are looking for a consistent approach to the environment."

**Scott Travers, President and
COO, Minas Basin Pulp and
Paper Co.**

Scott Travers warned that Atlantic Canada should not price itself out of the renewable energy equation by continuing to maintain a patchwork taxation and regulatory system that is different in each province. There is a lot of opportunity for the development of tidal, wave and wind technology but it must be developed as a region-wide energy sector. That includes R&D and transmission, as well as taxes, tariffs and regulations. Emissions-free energy generation is important for the environment but it is also essential if the region is to address energy security by reducing its need for imported fossil fuels to generate electricity.

"We are looking for a consistent regulatory environment across the country," Travers says. "We are looking for a consistent approach to climate change. We are looking for a consistent approach to energy. We are looking for a consistent approach to the environment."



Photo: Nova Scotia Power Inc.

The business case

Charles Demond, CEO, Atlantic Wind Power Corp.

The Atlantic region is well-positioned for wind power developments but if these projects are to succeed, and if Atlantic Canada is to attract further investment in wind power, communities must be willing to support the projects, said Charles Demond. Wind power is a high risk capital investment because developers must do extensive field research to find the right location for a wind farm; investors will avoid areas where they are likely to encounter community resistance. Right now in Nova Scotia, investors are interested in the area because the wind conditions are excellent, there is great potential for export and a need within the province for renewable energy production to offset reductions in production from coal-powered plants.

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Fred O'Brien, President and CEO, Maritime Electric

Markets in New England are the primary driver of energy developments in Atlantic Canada, said Fred O'Brien, and the four provinces must develop a cohesive regional transmission grid that enables the delivery of power between provinces and into New England. Maritime Electric has traditionally depended on power from New Brunswick to meet PEI's electricity needs but increasingly the island is developing its own resources, specifically wind power. However, consumers shouldn't expect prices to drop because wind power remains a relatively expensive power to produce. Instead, O'Brien predicts that oil and gas prices will come up to meet the price of alternative energy, making the latter the preferred choice because of its environmental performance.

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projects and sites and by eliminating province-by-province tariffs (known as pancaking) and taxation regimes. Bartlett joined many panelists in recommending a regional system operator, similar to what exists in the United States.

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Bruce McCallum, Insight Consulting, Past Chair, Canadian Bioenergy Association

Bruce McCallum reported that the struggling pulp and paper sector must make better use of biomass energy produced from wood, sawdust, bark and pulping liquor if Canadian mills are to survive. Finland provides a model to follow. It invests heavily in bioenergy R&D and offers incentives and grants to companies that produce power by recycling wood waste. Bioenergy produces 25 per cent of Finland's primary energy and is now in district heating plants to provide heating to residential and commercial customers. McCallum estimates that Atlantic Canada's forestry sector could support between 200 and 300 district heating plants.

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Don Bartlett, VP Development, Suez Renewable Energy NA

According to Don Bartlett, wind energy projects, such as Suez Renewable Energy's West Cape project, represent the single largest private sector investment in PEI's history and there is potential for more projects. To encourage increased investment, the four provincial governments must develop a regional approach, by streamlining the licensing of

The provincial perspective

Jack Keir
Minister of Energy,
Government of New Brunswick

The energy sector and in particular the major developments underway or planned for the Saint John region, will anchor the Government of New Brunswick's economic development strategy, says Jack Keir. It will focus on three complementary goals: to attract international investors to the region, thereby increasing access to capital to create jobs in the highly-skilled trades and professions that will be needed for these major projects; and to increase New Brunswickers' levels of expertise in specialized areas within the energy sector. In addition to driving development, the Government of New Brunswick, through Efficiency NB, will implement an education campaign and incentives program to encourage energy conservation.

"The energy sector is the backbone of the province's economic development strategy. It is the driving force behind the province's economic growth and the source of many of the jobs and investments that will drive the province's economic future."

Alison Scott
Deputy Minister of Energy,
Government of Nova Scotia

Alison Scott reported that the Environmental Goals and Sustainable Prosperity Act, introduced last spring, sits at the heart of the Government of Nova Scotia's long-term plans for energy development. The Act sets renewable energy standards, which require that 18.5 per cent of Nova Scotia's electricity be produced from renewable resources by 2013. This has instigated a rush to develop wind, tidal and wave power in the province, which is estimated to produce upwards of \$1 billion in new investments. The Department of Energy is also examining the proper mix between conventional energy sources and renewables in order to achieve climate change goals without causing too adverse an impact on the province's economy. This is part of ongoing work to develop a provincial climate change action plan.

"The energy sector is the backbone of the province's economic development strategy. It is the driving force behind the province's economic growth and the source of many of the jobs and investments that will drive the province's economic future."

Kathy Dunderdale
Minister of Natural Resources,
Government of Newfoundland & Labrador

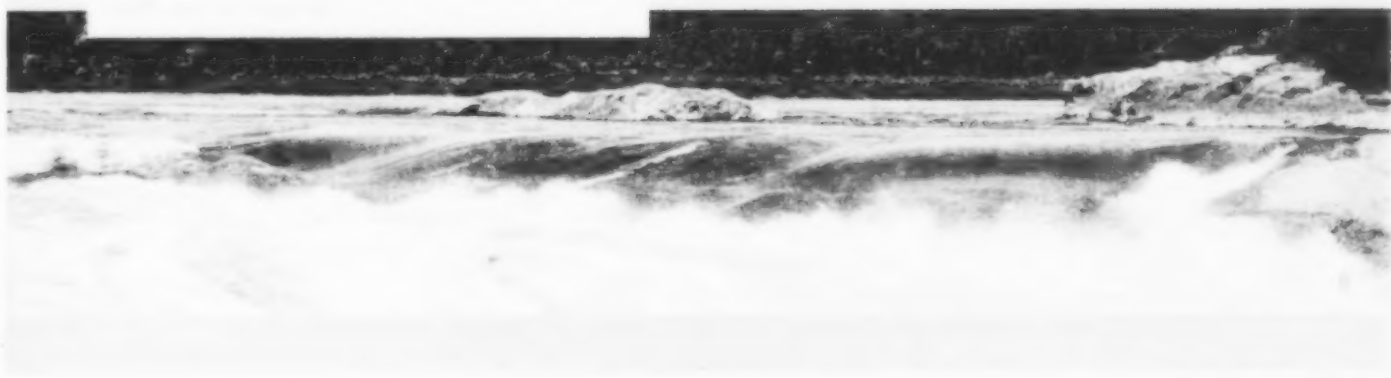
The Government of Newfoundland and Labrador's 35-year energy plan will use revenues from both equity investments and royalties from the oil and gas sector to drive development in hydro, wind and other renewable energy sources, said Kathy Dunderdale. The plan will increase the Government's equity investment in future offshore developments to 10 per cent, which will, according to Minister Kathy Dunderdale, give government officials a detailed and unfiltered understanding of the offshore oil and gas sector. On the renewable energy side, the Government is looking towards the development of the Lower Churchill to develop an electricity export market into the rest of North America and to power the island of Newfoundland, via a proposed subsea transmission system.

"The energy sector is the backbone of the province's economic development strategy. It is the driving force behind the province's economic growth and the source of many of the jobs and investments that will drive the province's economic future."

George Webster
Minister of Environment, Energy and Forestry,
Government of PEI

The minister told his audience he expects to have a discussion paper on the twin issues of energy efficiency and the diversification of the province's energy mix ready for public discussion in early 2008. The purpose is to develop a 10-year energy strategy, which Minister George Webster plans to present to government in spring 2008. PEI is heavily dependent on imported fossil fuels for heating and transportation. The government wants to explore a number of options to increase its use of renewable energy sources, including wind power from island sources and long-term contracts for hydro and nuclear power from within the Atlantic region.

"The energy sector is the backbone of the province's economic development strategy. It is the driving force behind the province's economic growth and the source of many of the jobs and investments that will drive the province's economic future."



Irving Oil examining ways to reduce carbon footprint

The CEO of Irving Oil wants alternative energy, such as tidal and wind, to be integrated into the Saint John-based oil company's plans for a second refinery.

Announced in October 2006, the Eider Rock project is undergoing both provincial and federal regulatory processes, including an environmental impact assessment, in order to obtain government approval to construct the refinery, which will be located a few kilometres south of its existing plant. The project will cost between \$5 billion and \$7 billion, making it the largest private sector investment in Atlantic Canadian history.

It is the central piece of the Saint John region's energy hub, which is designed to export energy into the U.S. market. "Our company is absolutely committed to being a part of the solution, and we want to help improve the environmental consequences of our community's demand for energy," said Irving at the Outlook 2008 conference in Saint John, N.B.

"In our Eider Rock project, we are looking at wind and tidal power and we're exploring how we can integrate them into a second refinery. We absolutely believe that alternative energies are very important for us to pursue, but when we look at the traditional investments in refining in North America there is a large opportunity."

With production slowing in the Gulf Coast, American regulators are looking for North American-based solutions and Irving says New Brunswick should grab the opportunity. "There is high demand for energy in the northeastern United States, and a lot of that energy is being supplied from areas that are far away," he said.

"New Brunswick has an opportunity that's not only economic, but also environmental, and we need to fully explore and exploit that opportunity to get energy landed in the northeast U.S. with less of a carbon footprint than any other potential source of supply."

Irving says the company will meet its environmental targets by using the best emissions technology and increasing energy efficiency through co-generation. "No matter how few litres of gasoline we consume in the future, we don't want that litre of gasoline to emit more carbon than it would in another part of the world," said Irving.

"Naturally, I believe very strongly there is a role for an oil company that is committed to the long-term future of the planet and the local community, and I am very proud that our company is pushing very hard on this."

There is a third environmental benefit to the Eider Rock project — less transportation. Many new refineries are under construction in the Middle East, China and India. Irving Oil's proposal would result in lower CO₂ emissions because of reduced distances to transport raw materials and finished products.

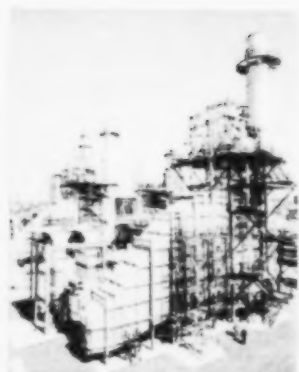
It would also anchor the Saint John region's energy hub by attracting outside investment and stimulating a surge in job growth. The new refinery will employ 5,000 people at the peak of construction and 1,000 permanent jobs once operational.

Business and government leaders hope to leverage the initial activity around the project to attract additional energy investments to the region. "There is a growing consensus in New Brunswick among government representatives, industry leaders, and community leaders about what really constitutes an energy hub investment," said Irving.

"We want to attract world-scale investments to this part of the world. The goal would be that every unit of energy we produce, whether it is a kilowatt of power or a litre of gasoline, would have a cost efficiency landed in the market that's very competitive."



Canaport terminal



Cogeneration facility



Irving Oil refinery

Photos Courtesy Irving Oil

Lower Churchill hydro and wind power bound for North American markets

The Lower Churchill project is the best electrical generation opportunity in North America but determining how to get the power to market remains its greatest challenge. Located in Labrador and managed by Newfoundland and Labrador Hydro, the project consists of two sites: the 2,000-megawatt Gull Island project, located 225 kilometres downstream from the existing Churchill Falls Generating Station, and the 824-megawatt Muskrat Falls, located 60 kilometres downstream from Gull Island.

"Market access is critical," said Ed Martin, president and CEO of the Crown corporation, during his address at the Outlook 2008 conference in St. John's NL. "We know we have an economical hydroelectric development. We know it is the best generation opportunity left in North America by far – nothing compares. But our access to North American markets is limited."

Newfoundland and Labrador Hydro is exploring three possible routes to get its electricity to North American markets. The first option is to utilize the transmission system already in place that connects Churchill Falls Generating Station to the Hydro Quebec grid using an open access agreement. This would enable Newfoundland and Labrador Hydro to deliver power into Quebec, Ontario and New Brunswick and

from there down into the U.S. The second option is to construct a subsea transmission cable from the coast of Labrador to either Nova Scotia or New Brunswick to tap into the mainland Maritime transmission system. The third would be to build a subsea transmission cable to connect Labrador to Newfoundland and provide electricity to the province's industrial, commercial and residential users.

These options must have enough transmission capacity to carry power from both the Lower Churchill project and from Churchill Falls. The latter project's contract with Hydro Quebec ends in 2041 and control will revert back to the Province of Newfoundland and Labrador.

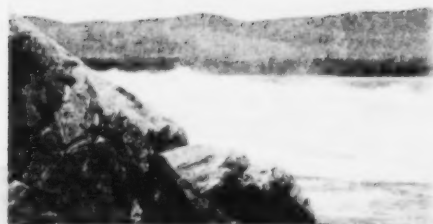
Connecting the Upper and Lower Churchill projects to the island of Newfoundland is a key element of the provincial government's recently released energy plan, which wants to eliminate the need for the Holyrood thermal generation station, located near St. John's, with emissions-free hydroelectric power.

"Technically, there is no question it is viable," said Martin of the subsea cable options. "Cost is the key consideration." Offsetting the capital costs is the North American marketplace's increasing demand for power that is produced in an environmentally sustainable way.

That makes the Lower Churchill very appealing to consumers, says Martin. "Hydro-electricity obviously reduces dependency on fuel generation, it is a well-known reliable technology and, from an environmental perspective, the Lower Churchill project has great potential to be a sustainable, predictably-priced, made-in-Canada solution to our country's energy shortage."

Of particular interest to Newfoundland and Labrador Hydro, is the opportunity for wind developments alongside hydroelectric generation. Hydro, as Martin told the sold-out audience, firms up the wind. When the wind is blowing – as it often is in Atlantic Canada – the Lower Churchill will slow its hydro production down and store the water. When the wind stops blowing, hydro production will increase.

"That gives us an extra competitive advantage over many other jurisdictions because of what we can do with respect to wind and hydro," said Martin. "Part of the engineering effort going on right now is incorporating the wind engineering because, as we design and develop the Lower Churchill, it is that integration with the Lower Churchill and the Upper Churchill, which is going to have the largest value."



About the Atlantic Provinces Economic Council

The Atlantic Provinces Economic Council (APEC) is an independent think-tank dedicated to economic progress in Atlantic Canada. APEC is a trusted source of analysis and advice on current and emerging trends in the region's economy. Founded in 1954, APEC is an effective catalyst through which government, business, labour and other stakeholders can develop the strategies to respond to a changing world.

More information on APEC is available by:

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About APEC's Outlook 2008 Conferences

APEC holds its annual Outlook conferences in November. These half-day events are held in each of the four Atlantic provinces.

The conferences combine an economic outlook by APEC economists with presentations on a featured topic, all designed to give those attending the best information on prospects and opportunities for the Atlantic region in the coming year. A continental breakfast during registration and a morning coffee break provide ample opportunities for networking.

The audience for this event has grown steadily over the years. 725 delegates attended the 2008 conferences. A majority of attendees were senior executives from business and government.



APEC Membership Benefits

The Atlantic Provinces Economic Council (APEC) plays a vital role in promoting economic growth in Atlantic Canada through research, publications, conferences and leadership on key economic issues. Support from our members is essential to our continued success as an independent voice for Atlantic Canada.

- Access to APEC's members-only website, which features dynamic charts and tables illustrating current economic trends and performance in Atlantic Canada, a searchable version of APEC's Major Projects Inventory, select presentations by APEC staff, access to all APEC publications in electronic format and account management and online payment options;
- Detailed quarterly analysis and reports on the Atlantic region's economy (Atlantic Report & Report Card);
- Annual economic forecasts;
- Advance notice and discounted rates for seminars & conferences;
- Advance notice and discounted rates for occasional publications & services;
- Access to economics staff for information requests;
- Special presentations by APEC staff at annual or management meetings; and
- Sponsorship opportunities related to APEC events and publications.

